



May 25, 2016

Dear Reader:

Enclosed for your review and comment is a Draft Checklist Environmental Assessment (CEA) for an amendment to the E. S. Stone and Structure, Inc., (E. S. Stone) operating permit (00163) located near Harlowton, MT. E. S. Stone, located at PO Box 28, Ryegate, MT 59074 filed an amendment on January 8, 2016 to their Operating Permit from the Montana Department of Environmental Quality (DEQ), Hard Rock Mining Bureau in Helena. DEQ has prepared a CEA for amendment 006. E.S. Stone is proposing two new sites. The sites are located at:

Site 19: Township 22 North, Range 1 East, part of Section 29. Total area to be permitted in Site 19 would be 365 acres in Cascade County about 5 miles north-northwest of Vaughn, MT; and

Site 20: Section 20 North, Range 1 East, Section 2 (E ½ of the section and W ½ of SW ¼ of the section), Section 1 (W 1/2) , and Section 11 (5 acres in SW ¼ of NW ¼); Township 21 North, Range 1 East, Section 35 (SE ¼ and S ½ of NE ¼). Total area to be permitted in Site 20 is 965 acres in Cascade County about 2 miles South of Vaughn, MT.

Rock would be removed for the purpose of landscaping and masonry. The amendment area would consist of a total of about 1,330 additional acres on private and state-owned land of which about 45 acres would be disturbed at any one time (20 acres at site 19 and 25 acres at site 20).

E.S. Stone has 8,734 acres of permit area on 11 existing sites currently approved under Operating Permit 00163, of which a total of 720 acres can be disturbed at any one time. This permit amendment would add approximately 1,330 acres to the permit area, for a total of 10,064 acres. New site 19 would add 365 acres and site 20 would add 965 acres.

E.S. Stone quarries landscaping and masonry rock found along outcrops, hilltops, and other areas. Rock in Sites 19 and 20 is proposed for surface picking where rock exposed on the surface is pried up, either by hand, or with the aid of a skid steer loader or excavator. The excavated stone would be transported to a palleting/staging area using a skid-steer loader. Palletted rock would be loaded onto trucks for shipping offsite. E.S. Stone's lease with the Montana Department of Natural Resources and Conservation includes permission to use an existing two-track road that runs north and east from the gate where the state fence meets Taft Hill Road and affords access to the Hastings property.

The proposed amendment has been reviewed for compliance under a Supplemental Programmatic Environmental Assessment (SPEA) for a General Quarry Operating Permit published by the DEQ in February 2004.

The site meets all the requirements under the SPEA except that the disturbance cannot be kept below five acres disturbed and unreclaimed at any one time. E.S. Stone would have a pallet and splitting yard.

This Draft CEA evaluates the potential impacts from this proposed amendment. The DEQ must decide whether to approve the permit as proposed, deny the request for an operating permit, or approve the operating permit with modifications.

The draft CEA is available for public review and comment at: <http://deq.mt.gov/Land/hardrock>. The comment period ends on June 30, 2016.

The Draft CEA addresses issues and concerns raised during public involvement and from agency scoping. The agency has decided to approve the amendment with modifications. The modifications are: If golden eagle nests are found in the project area, the area around these nests should be avoided until mid-July to August when eaglets typically fledge. If burrowing owls are found in the project area, then the burrows should be avoided until after October when owls migrate south. This is not a final decision. This conclusion may change based on comments received from the public on this Draft CEA, new information, or new analysis that may be needed in preparing the Final CEA.

Copies of the Draft CEA can be obtained by writing DEQ, Hard Rock Mining Bureau, PO Box 200901, Helena, MT 59620, c/o Herb Rolfes, or calling (406) 444-3841; or sending email addressed to hrolfes@mt.gov.

Since the Final EA may only contain public comments and responses, and a list of changes to the Draft CEA, please keep this Draft CEA for future reference.

Warren D. McCullough

Warren D. McCullough, Chief

Hard Rock Mining Bureau

5/25/16

Date

EXPANDED CHECKLIST ENVIRONMENTAL ASSESSMENT

COMPANY NAME: E.S. Stone and Structure, Inc., P. O. Box 28, Ryegate, MT 59074

PROJECT: Building stone quarry and rock collecting sites.

PERMIT OR LICENSE: Amendment Application 006 to Operating Permit 00163

LOCATION:

Site 19: Township 22 North, Range 1 East, part of Section 29. Total area to be permitted in Site 19 would be 365 acres in Cascade County about 5 miles north-northwest of Vaughn, MT; and

Site 20: Section 20 North, Range 1 East, Section 2 (E ½ of the section and W ½ of SW ¼ of the section), Section 1 (W 1/2), and Section 11 (5 acres in SW ¼ of NW ¼); Township 21 North, Range 1 East, Section 35 (SE ¼ and S ½ of NE ¼). Total area to be permitted in Site 20 is 965 acres in Cascade County about 2 miles South of Vaughn, MT.

(See location maps 1, 2, and 3 in Appendix A of application submitted on January 8, 2016)

PROPERTY OWNERSHIP: [] Federal [X] State [X] Private

TYPE AND PURPOSE OF ACTION: E.S. Stone and Structure, Inc. (E.S. Stone) currently quarries and collects building stone on 11 sites under Operating Permit 00163 in Golden Valley, Wheatland, and Cascade counties.

Operating Plan: E.S. Stone filed an application on January 8, 2016 for an amendment to Operating Permit 00163 from the Montana Department of Environmental Quality (DEQ), Environmental Management Bureau, now the Hard Rock Mining Bureau in Helena, MT. E.S. Stone has lease agreements with the landowners. Rock would be removed for the purpose of landscaping and masonry. The amendment area would consist of a total of about 1,330 additional acres on private and state-owned land of which about 45 acres would be disturbed at any one time (20 acres at site 19 and 25 acres at site 20).

E.S. Stone has 8,734 acres of permit area on 11 existing sites currently approved under Operating Permit 00163, of which a total of 720 acres can be disturbed at any one time. This permit amendment would add approximately 1,330 acres to the permit area, for a total of 10,064 acres. New site 19 would add 365 acres and site 20 would add 965 acres.

Operating Permit 00163	Current Conditions	Amendment 006	Total
Permit Area	8,734 acres	1,330 acres	10,064 acres
Permitted Disturbance	1,960 acres	1,330 acres	3,290 acres
Maximum Acres Disturbed at Any One time	720 acres	45 acres	765 acres
Bonded Acres	471 acres	70 acres	541 acres

E.S. Stone quarries landscaping and masonry rock found along outcrops, hilltops, and other areas. Rock in Sites 19 and 20 is proposed for surface picking where rock exposed on the surface is pried up, either by hand, or with the aid of a skid steer loader or excavator. The excavated stone would be transported to a palleting/staging area using a skid-steer loader. Palletted rock would be loaded onto trucks for shipping offsite. E.S. Stone's lease with the Montana Department of Natural Resources and Conservation includes permission to use an existing two-track road that runs north and east from the gate where the state fence meets Taft Hill Road and affords

access to the Hastings property.

Reclamation Plan: Surface picking only is proposed so reclaimed land will be returned to approximate original topography. All equipment and any temporary structures would be removed. Land will be reclaimed as pasture. Rock removal sites and the palleting/staging site will be scarified as needed before replanting.

Sites 19 and 20 would have no significant soil disturbance and would not need soil stockpiles as rock would be picked from the surface without subsurface excavation.

The proposed amendment has been reviewed for compliance under a Supplemental Programmatic Environmental Assessment (SPEA) for a General Quarry Operating Permit published by the DEQ in February 2004. The site meets all the requirements under the SPEA except that the disturbance cannot be kept below five acres disturbed and unreclaimed at any one time. E.S. Stone would have a pallet and splitting yard.

IMPACTS ON THE PHYSICAL ENVIRONMENT	
RESOURCE	[Y/N] POTENTIAL IMPACT AND MITIGATION MEASURES
1. GEOLOGY AND SOIL QUALITY, STABILITY AND MOISTURE: Are soils present which are fragile, erosive, susceptible to compaction, or unstable? Are there unusual or unstable geologic features? Are there special reclamation considerations?	<p>[Y]</p> <p><u>Soils</u></p> <p>Both proposed sites are covered with predominantly well-drained rocky clay loam soils. Surface picking of rock would occur on landscapes that have a thin soil cover. E.S. Stone would be focusing collection activities in areas where multiple rocks are lying on the surface of the ground or outcropping in rocky ridges. Soil maps prepared by the Natural Resources Conservation Service are provided in Appendix C of the application.</p> <p>Site 19 is predominantly a one to two foot thick very stony loam which is underlain by bedrock. This soil has saturated hydraulic conductivities that range from 0.20 to 0.57 inches per hour. This soil is not erosive.</p> <p>Site 20 is more varied in soil type. Aridisols in this area range from clays to loams and from 3 to 80 inches in depth. Saturated hydrologic conductivities range from 0.06 to 1.98 inches per hour. The soils on slopes less than 8 percent are not erosive. Hillside slopes are more erosive with a higher clay content.</p> <p>Soil impacts would be insignificant because the proposed rock collection process is minimally invasive. Also, concurrent reclamation would limit the amount of soil susceptible to erosion from wind and water. Failed cover plants would be reseeded until vegetation is successfully established. No permanent roads would be constructed. Traffic volume would not increase as a result of approval of the amendment.</p> <p><u>Geology</u></p> <p>Removal of Cretaceous Blackleaf Formation rocks from the surface and shallow pits is an unavoidable impact of rock product operations.</p>

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	<p>Sandstone rocks from the Cretaceous Blackleaf Formation are mapped in the permit areas in the Great Falls North and South 30' by 60' quadrangles published by the Montana Bureau of Mines and Geology Open-File Reports 459 and 407.</p> <p><u>Special Reclamation Considerations</u></p> <p>None.</p>
<p>2. WATER QUALITY, QUANTITY AND DISTRIBUTION: Are important surface or groundwater resources present? Is there potential for violation of ambient water quality standards, drinking water maximum contaminant levels, or degradation of water quality?</p>	<p>[N] All surface water bodies are at least 500 feet from the proposed permit areas.</p> <p>There is one domestic well within 1000 feet of Site 19. It has a GWIC Log# 140814, and was drilled in Township 22 N, Range 1 East, Section 32. It is a domestic well and has a depth of 56 feet and a static water level of 29 feet. This well was completed July 8, 1981.</p> <p>There is one domestic well within 1000 feet of Site 20. It has a GWIC Log# 206099, and was drilled in Township 21 N, Range 1 East, Section 36. It is a domestic well and has a depth of 200 feet and a static water level of 82 feet. This well was completed August 25, 2003.</p> <p>Surface rock picking is unlikely to impact nearby domestic wells.</p>
<p>3. AIR QUALITY: Will pollutants or particulate be produced? Is the project influenced by air quality regulations or zones (Class I airshed)?</p>	<p>[Y] There would be dust produced by the operation due to travel on the gravel roads commonly found in the area. Landowners can require dust control as needed on their leases to the company. Concurrent reclamation would limit the potential for blowing dust from the operating area. The rock fragments left in the soils would also limit blowing dust.</p>
<p>4. VEGETATION COVER, QUANTITY AND QUALITY: Will vegetation communities be significantly impacted? Are any rare plants or cover types present?</p>	<p>[Y] Quarrying would occur on landscapes that have a thin soil cover. The sites are dominated by native grasses, providing approximately 50 percent ground cover. Species composition varies over the proposed amendment areas. However, a generalized species composition table for both sites would be:</p> <p>Bluebunch wheatgrass 30 to 50%</p> <p>Idaho fescue 20 to 30%</p> <p>Needle and thread 20 to 30%</p> <p>Western and thickspike wheatgrass 10 to 20%</p> <p>Prairie Junegrass, blue grama, threadleaf sedge 10 to 20%</p> <p>Forbs 10 to 20%</p> <p>The disturbed sites would be broadcast seeded with:</p> <p>40% Critana thickspike wheatgrass at 11 lbs./acre</p> <p>20% Secar bluebunch wheatgrass at 6 lbs./acre</p> <p>20% Lodorn green needlegrass at 5 lbs./acre</p> <p>10% Sandberg bluegrass at 0.5 lbs./acre</p> <p>10% Annual ryegrass at 2 lbs./acre</p>

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	<p>for a total of 24.5 lbs./acre.</p> <p>Leafy spurge is present in the areas. The operator would use weed free seed and control noxious weeds per the Cascade County Weed Management Plan.</p> <p>The plant communities on these shallow to very shallow range sites are dominated by native grasses. The plant communities that would be impacted are common in the sedimentary plains of Montana. The site is on native range used for grazing and crops.</p> <p>A search of the Montana Natural Heritage Program (MNHP) database did not identify any rare plants or plant species of concern at either site 19 or site 20.</p> <p>Disturbance on the sites would lead to more noxious weed invasion in the areas, especially from the existing populations of leafy spurge. Weed control efforts would limit these impacts. The disturbed land would be reclaimed to livestock grazing and dryland farming. Loss of native species on disturbed rangeland would be an unavoidable impact of disturbance.</p>
5. TERRESTRIAL, AVIAN AND AQUATIC LIFE AND HABITATS: Is there substantial use of the area by important wildlife, birds or fish?	<p>[Y] The rock product areas are commonly used by mule deer and antelope. They would be displaced around the human activity until reclamation is completed. There is no winter range for ungulate species or aquatic habitat in the amendment areas.</p>
6. UNIQUE, ENDANGERED, FRAGILE OR LIMITED ENVIRONMENTAL RESOURCES: Are any federally listed threatened or endangered species or identified habitat present? Any wetlands? Species of special concern?	<p>[Y] A search of the Montana Natural Heritage Program (MNHP) database at the Montana State Library in Helena, MT found no known threatened and endangered (T&E) animal species, or animal species of concern at site 19.</p> <p>Montana Natural Heritage Program database did find 9 species occurrence reports for 5 animal species of concern at site 20.</p> <p>The Great Blue Heron is found in a riparian forest along Muddy Creek located to the north of site 20. Site 20 does not contain a riparian forest and surface rock picking on site 20 would not impact the riparian forest located two miles to the north where Great Blue Heron are found. The proposed project is not likely to impact Great Blue Heron or essential habitat.</p> <p>The golden eagle is protected by the Bald and Golden Eagle Protection Act and shooting, trapping and poisoning is prohibited. The golden eagle is a year-round resident in the entirety of Montana with a breeding range that extends from the arctic to central Mexico. Golden eagles nest on cliffs and in large trees and hunt over prairie and open woodlands. Site 20 does not contain woodlands or snags but does have some outcrops that could provide nesting habitat, though the outcrops on site 20 do not provide the types of inaccessible perches preferred by golden eagles. Site 20 does not contain any</p>

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known golden eagle nests, however if golden eagle nests are found in the project area, the area around these nests should be avoided until mid-July to August when eaglets typically fledge. Surface picking of rock at site 20 is unlikely to impact golden eagle or essential habitat.

Burrowing Owls are small (9.5 inch) ground-dwelling owls found in open grasslands east of the continental divide where they nest and roost in abandoned animal burrows. The burrowing owl is considered a sensitive species by BLM and USFS. Burrowing owls are active both day and night and are typically observed on the lip of their prairie burrows, or on abandoned fence posts. Burrowing owls are migratory summer residents in Montana arriving in March and departing in October. The burrowing owl is tied to prairie dog and ground squirrel communities where the burrows provide essential habitat. No prairie dog communities have been identified at site 20, however prairie dog communities do exist southeast of the site in First Peoples Buffalo Jump State Park and burrowing owls have been documented at that location. Picking rock from the surface of site 20 is unlikely to impact burrowing owls or their habitat, however if burrowing owls are found in the project area, then the burrows should be avoided until after October when the owls migrate south.

The Black-tailed prairie dog is a BLM and USFS sensitive species that has been identified at First Peoples Buffalo Jump State Park, located southeast of site 20. Black-tailed prairie dogs inhabit dense communities that are readily identifiable where grasses are denuded or suppressed from underground herbivory. Colonies are associated with silty clay loams, sandy clay loam and loams with fine to medium textured soils preferred for black-tailed prairie dogs so site 20 may contain suitable habitat for animals to disperse from the known colonies on the State Park located to the southeast of site 20. Black-tailed prairie dogs are classified as vertebrate pests by the Montana Department of Agriculture, however, if black-tailed prairie dogs are found on Site 20 they may not be shot, trapped or poisoned as part of permitted surface rock picking activities. Consequently surface rock picking at site 20 is not likely to impact black-tailed prairie dogs populations.

The chestnut-collared longspur is considered a sensitive species by the BLM. This medium size (6 inch) passerine (perching bird) is found in native prairie grasslands east of the continental divide. The chestnut-collared longspur is a summer resident that breeds on the northern Great Plains and winters in the southwestern United States and northern Mexico. Site 20 is not considered optimal habitat for the species, however, the species has been detected in Cascade County near site 20. This species is most at risk from conversion of prairie to agriculture or urban development. Surface rock picking at site 20 is not likely to create the type of disturbance that has led to decline of this species. Disturbed native grasslands such as recently grazed, mowed, or burned areas provide the open, sparse vegetation preferred

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	by this species. Rock picking activity that provides minor disturbance to the ground surface may improve conditions for chestnut-collared longspur.
7. HISTORICAL AND ARCHAEOLOGICAL SITES: Are any historical, archaeological or paleontological resources present?	<p>[Y] A records search by the State Historic Preservation Office did not return any identified historical or archaeological sites.</p> <p>DNRC performed a cultural resources inventory on the proposed access trail and staging area located on DNRC land. The inventory identified three sites on the 475 acres of DNRC land inventoried.</p> <p>24CA1745 Stone Circles and Cairns 24CA1749 Cairns 24CA1750 Historic homestead</p> <p>DNRC's evaluation determined that site 24CA1750 Historic homestead was not eligible for listing on the National Register of Historic Places as integrity and significance were not indicated for the remains of this homestead.</p> <p>DNRC's evaluation of site 24CA1745 Stone Circles and Cairns and site 24CA1749 Cairns did not lead to a determination of eligibility for the National Register of Historic Places as the evaluation did not include detailed metric and non-metric information concerning the stone features. The two-track trail and staging area will not physically impact the stone circles or cairns. DNRC recommended that if the stone features would be disturbed by future development then they should be adequately excavated and mapped.</p> <p>DNRC's limited survey determined that the proposed site has the potential to impact cultural resources. E.S. Stone has committed to protect any resources found.</p>
8. AESTHETICS: Is the project on a prominent topographic feature? Will it be visible from populated or scenic areas? Will there be excessive noise or light?	<p>[Y] The two proposed rock collecting sites are in a rural area. Activity would be visible from nearby county roads during operations, but the disturbance created would not be readily apparent in the absence of construction equipment. The reclaimed rock collecting sites would appear similar to the original rangeland in the area.</p> <p>No new roads would be constructed.</p> <p>The hours of operation would be four days per week, 10 hours per day, all year long.</p>
9. DEMANDS ON ENVIRONMENTAL RESOURCES OF LAND, WATER, AIR OR ENERGY: Will the project use resources that are limited in the area? Are there other activities nearby that will affect the	<p>[N] The project sites are isolated, and would require a minimum of energy resources.</p>

IMPACTS ON THE PHYSICAL ENVIRONMENT	
project?	
10. IMPACTS ON OTHER ENVIRONMENTAL RESOURCES: Are there other activities nearby that will affect the project?	[N] The surrounding land uses are livestock grazing and dryland farming.

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11. HUMAN HEALTH AND SAFETY: Will this project add to health and safety risks in the area?	[N]
12. INDUSTRIAL, COMMERCIAL AND AGRICULTURAL ACTIVITIES AND PRODUCTION: Will the project add to or alter these activities?	[N] These operations are a source of income for area ranchers.
13. QUANTITY AND DISTRIBUTION OF EMPLOYMENT: Will the project create, move or eliminate jobs? If so, estimated number.	[N] Stone producing operations in Wheatland County are major employers, providing work for a segment of the population that is otherwise unemployed, or underemployed. While work would be created in Cascade County, no new employees would be necessary.
14. LOCAL AND STATE TAX BASE AND TAX REVENUES: Will the project create or eliminate tax revenue?	[N] This project would create tax revenue.
15. DEMAND FOR GOVERNMENT SERVICES: Will substantial traffic be added to existing roads? Will other services (fire protection, police, schools, etc.) be needed?	[N] There is no anticipated need for increased government services as a result of this project.
16. LOCALLY ADOPTED ENVIRONMENTAL PLANS AND GOALS: Are there State, County, City, USFS, BLM, Tribal, etc. zoning or management plans in effect?	[N]
17. ACCESS TO AND QUALITY OF RECREATIONAL AND WILDERNESS ACTIVITIES: Are wilderness or recreational areas	[Y] First Peoples Buffalo Jump State Park is two miles southeast of site 20. This park is a National Historic Landmark and an archaeological site with possibly the largest bison cliff jump in North America. The park has an interpretive trail, picnic tables and a

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nearby or accessed through this tract? Is there recreational potential within the tract?	protected black-tailed prairie dog town.
18. DENSITY AND DISTRIBUTION OF POPULATION AND HOUSING: Will the project add to the population and require additional housing?	[N]
19. SOCIAL STRUCTURES AND MORES: Is some disruption of native or traditional lifestyles or communities possible?	[N] The work force would be local or drawn from neighboring counties. Royalty payments made to landowners of rock picking sites help to maintain the sometimes tenuous existence of family owned farms and ranches recovering from the regional drought.
20. CULTURAL UNIQUENESS AND DIVERSITY: Will the action cause a shift in some unique quality of the area?	[N]
21. PRIVATE PROPERTY IMPACTS: Are we regulating the use of private property under a regulatory statute adopted pursuant to the police power of the state? (Property management, grants of financial assistance, and the exercise of the power of eminent domain are not within this category.) If not, no further analysis is required.	[Y]
22. PRIVATE PROPERTY IMPACTS: Does the proposed regulatory action restrict the use of the regulated person's private property? If not, no further analysis is required.	[N] In 1995, the Montana Legislature amended the Montana Environmental Policy Act (MEPA) to require state agencies to evaluate in their environmental documents any regulatory restrictions proposed to be imposed on the use of private property. Section 75-1-201(1)(b)(iv)(D), MCA. Alternatives and mitigation measures designed to make the project meet minimum environmental standards with implementation methods specifically required by federal or state laws and regulations are excluded from evaluation under the implementing guidelines for Section 75-1-201(1)(b)(iv)(D), MCA.
23. PRIVATE PROPERTY IMPACTS: Does the agency have legal discretion to impose or not impose the proposed restriction or discretion as to how the restriction will be imposed? If not, no further analysis is required. If so, the	[Y] The Proposed Action and Type and Purpose sections above identify the objectives of this environmental assessment. See item 22 above.

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agency must determine if there are alternatives that would reduce, minimize or eliminate the restriction on the use of private property, and analyze such alternatives.	
24. OTHER APPROPRIATE SOCIAL AND ECONOMIC CIRCUMSTANCES:	[N]
25. SAGE GROUSE EXECUTIVE ORDER: Is the project proposed in core, general or connectivity sage grouse habitat, as designated by the Sage Grouse Habitat Conservation Program (Program) at: https://sagegrouse.mt.gov If yes, did the applicant attach documentation from the Program showing compliance with Executive Order 12-2015 and the Program's recommendations? If so, attach the documentation to the EA and address the Program's recommendations in the permit. If project is in core, general or connectivity habitat and the applicant did not document consultation with the Program, refer the applicant to the Sage Grouse Habitat Conservation Program.	[N]

25. Alternatives Considered:
No Action: Deny the request for the amendment to the operating permit. No issues were identified which would require denying the amendment.
Approval: Approve the amendment as proposed.
Approval with Modification: If golden eagle nests are found in the project area, the area around these nests should be avoided until mid-July to August when eaglets typically fledge. If burrowing owls are found in the project area, then the burrows should be avoided until after October when owls migrate south.
26. Public Involvement: A legal notice was published in the *Harlowton Times/Clarion* and the *Great Falls Tribune*, and a press release was issued on receipt of the application for an amendment to the operating permit. A legal notice and press release will be published with release of the Draft EA.
27. Other Governmental Agencies with Jurisdiction: None
28. Magnitude and Significance of Potential Impacts: There would be no significant impacts associated with

this proposal.

29. Building stone quarries and rock collecting sites are increasing throughout Montana. DEQ has prepared a SPEA on these operations. The operations that qualify must meet the following provisions: Any individual small quarry may maintain a working disturbance of up to five acres. Total disturbance during the life of an individual operation could exceed five acres, but concurrent reclamation would be required to keep the disturbance at any one time to five acres or less. Access roads would not be included in the disturbed total, but the operator would submit a reclamation bond for roads that do not have an approved use after quarrying. Roads approved for the land use after quarrying and access or haulage roads which are required by a local, state, or federal agency having jurisdiction over that road would not have to be bonded;

- There would be no impact to any wetland, surface or ground water;
- There would be no constructed impoundments or reservoirs used in the operation;
- There would be no potential to produce any acid or other pollutive drainage from the quarry;
- There would be no impact to threatened and endangered species; and
- There would be no impact to significant historic or archaeological features.

The site proposed by E.S. Stone meets all of these requirements except the operator cannot keep the disturbance to less than five acres disturbed and unreclaimed at any one time. Even though the site may exceed five acres disturbed and unreclaimed at any one time, there would be no other impacts other than the size of the disturbance area over those analyzed in the SPEA. This Checklist EA tiers to the 2004 SPEA, the 2010 EA for amendment 004, and the 2012 EA for amendment 005. Reclamation would limit impacts. DEQ would bond E.S. Stone to reclaim the acres disturbed by quarrying.

Many acres could be potentially disturbed by quarry operations throughout Montana as a result of the demand for building stone. The cumulative impacts from these operations can lead to more soil disturbance requiring reclamation, more impacts to native plant communities, and increased potential for noxious weed invasion and spread, as well as economic benefits to the local economies from quarry operations.

30. Recommendation for Further Environmental Analysis:

☐ EIS ☐ More Detailed EA ☒ No Further Analysis

The DEQ has selected the Approval with Modification as the preferred alternative.

DEQ has considered the criteria set forth in ARM 17.4.608 and has determined that an EA is an appropriate level of analysis. As reflected in this Expanded Checklist EA, none of the adverse effects of the impacts resulting from the proposed tests are significant. Impacts that do result from the proposed action of removing rock from the surface and near surface are discussed above. Other than the temporary disturbance of soil and vegetation there would be no impacts. The minor ground disturbances resulting from the removal of decorative and masonry rock would be recontoured and revegetated.

31. References:

GWIC, <http://mbmggwic.mtech.edu/>,
NRCS, <http://websoilsurvey.sc.egov.usda.gov/App/WebSoilSurvey.aspx>,
NRIS and MNHP, <http://nriss.mt.gov/reqapp/userMain.asp>.

32. EA Checklist Prepared By:

Herb Rolfes, DEQ Operating Permits Section Supervisor
Charles Freshman, DEQ Environmental Engineer

Betsy Hovda, DEQ Environmental Science Specialist
John Koerth, DEQ Environmental Specialist

33. This EA was reviewed by:
Warren McCullough, DEQ, Hard Rock Mining Bureau, Chief

Approved By:

<u>Warren D. McCullough</u>	<u>5/25/16</u>
Signature	Date
Warren D. McCullough, Chief	
Hard Rock Mining Bureau, DEQ	

File: 00163.70

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